



## *VMware vSphere -Power CLI*

### INTRODUCTION

V5

This exciting, hands-on, lab intensive course covers the how to install, configure and use VMware Power CLI. This two day packed course has students learn in the in and out of Power CLI, Students will learn about commandlets, automate configuration of virtual switches, datastores, virtual machines, run storage vmotion, vmotion, configure clusters and much more. Our Power CLI course is intended for students with significant production experience in the Infrastructure 3 / vSphere 4/5 product suite. It is our intention to take your existing knowledge base and expand upon that.

### CLASSROOM SETUP

Each student will have an ESXi Server and a Windows Server 2008 workstation. Our classroom lab will share a cluster of ESXi Servers, a variety of different Storage solutions (SAN, NAS, ISCSI, local, etc.) as needed, a vCenter Server, a variety of 3<sup>rd</sup> party tools and access to many pre-configured VM's (Microsoft, Novell, Red Hat, Ubuntu ...etc).

### PRE-REQUISITES

- ESXi Server familiarity
- VirtualCenter/vCenter usage
- VirtualCenter/vCenter administration
- Excellent familiarity with Windows
- Some familiarity with Linux

### MAJOR AREAS COVERED

- The Main commandlets in vSphere PowerCLI
- Learn how to get help for commandlets
- Fully automate ESXi Host Configuration
- Fully automate configuration of virtual switches on ESXi hosts
- Fully automate configuration of datastores on ESX hosts
- Learn how to provision Virtual Machines
- Automate creation of virtual machines
- Change virtual machine settings programmatically
- Run vSphere PowerCLI scripts in virtual machines
- Automate virtual machine protection
- Automate virtual machine storage migration
- Automate VMware vMotion™
- Create a VMware Distributed Resource Scheduler/VMware High Availability cluster
- Learn how to use PowerGUI
- Automate cluster configuration
- Automate resource pool creation and configuration
- Automate reporting about virtual machines
- Automate reporting about ESX hosts
- Automate reporting about clusters



## COURSE OUTLINE

This course covers items from the following VMware courses.

### Power CLI

#### Introduction to PowerCLI

- PowerCLI and PowerShell
- VMware PowerCLI toolkit
- PowerCLI console
- Connecting to vSphere
- Connecting to vCenter
- PowerCLI cmdlets

#### vSphere Host Management

- PowerCLI Host cmdlets
- Join ESX Servers to vCenter
- Configure Host services
- Setup Host Profiles

#### Virtual Machine Management

- VM cmdlets
- VM automation
- Resource cmdlets
- Perform vMotion and svMotion
- Use PowerCLI within VM's

#### Virtual Networks

- Using cmdlets with vswitches
- Standard switch use
- vDs switch use
- Nic Teaming
- Portgroup setup and configuration



## PowerCLI Storage

- Storage cmdlets
- Host bus adapters
- Iscsi target creation
- ESXI disks and partitions

## VMware HA/DRS Clustering

- Cluster cmdlets
- Cluster creation
- Setting DRS affinity rules
- Resource pool support

## VMware vCenter Management

- vCenter cmdlets
- Setting up containers
- Access control

## VMware PowerCLI Reporting

- Report creation
- Host inventory
- VM Inventory
- Storage Inventory
- Storage reporting